## A NEW SPECIES OF GALACTIA (FABACEAE) IN THE SOUTHEASTERN UNITED STATES

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Abstract: <u>Galactia minor</u> Duncan (FABACEAE) of the Southeastern United States is described as a new species and compared with the similar <u>G</u>. <u>regularis</u> (L.) BSP.

Certain aspects of the variation in <u>Galactia</u> regularis (L.) BSP. sensu Fernald (1950), Gleason and Cronquist (1963), Wilbur (1963), and Radford et al (1964) have bothered me for many years. Sporadic field and herbarium studies have led me to the conclusion that one segment deserves separate specific rank. It is described below.

GALACTIA MINOR Duncan, sp. nov.

Herba perennis. Caule prostrati, plerumque geniculati, ferentes pilos adpressos antrorsos 0.05-0.25 mm longos; internodia circiter longitudo longissimae foliolae. Folia composita, 18-38 mm longa; foliola 3, elliptica, retusa vel rarenter apiculata, integra, grandissimum 6-14 mm latum et 14-28 mm longum, ferens pilos adpressos antrorsos. Inflorescentiae axillares, 15-40 mm longae et circiter aequae vel breviores quam folia. Flores 1-3(4), 10-17 mm longi. Calyx 6.5-10 mm longus. Legumen 30-42 mm longum, 4-5 mm latum, ferens pilos adpressos antrorsos. Semina (5)6-8.

TYPE: UNITED STATES: Long County, Georgia: Sandhills adjacent to Altamaha River bottom sw of Ludowici, 2 Aug. 1953, Wilbur H. Duncan 16993 (HOLOTYPE, GA 99594).

Perennial herb. Stems prostrate, usually slightly geniculate, rarely twining at the tips, bearing appressed antrorse hairs 0.05-0.25 mm long; internodes about as long as longest leaflet of the adjacent nodes. Leaves compound, 18-38 mm long; leaflets 3, narrowly elliptic to elliptic, retuse or rarely apiculate, entire, largest 6-14 mm wide and 14-28 mm long, bearing small antrorse hairs. Inflorescences axillary, 15-40 mm long and about the length or shorter than the subtending leaves, bearing 1-3(4) flowers from 11-17 mm long. Calyx 6.5-10 mm long. Legume 30-42 mm long, 4-5 mm wide, bearing appressed antrorse hairs. Maximum number of seeds (5)6-8 per legume.

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A selection of other representative <u>G</u>. <u>minor</u> specimens follows to represent the species more widely. Duplicates of these are likely to be in other herbaria. --- <u>Duncan</u> 4001, 28 Aug. 1941, Irwin Co., Ga. Sandhill area just E of Alapaha R., W of Ocilla (GA 49857). --<u>Thorne</u> 5742, 30 July 1947, Baker Co., Ga. Sandy bank of Flint R. near its junction with Ichawanochaway Creek (GA 37546). --<u>Cronquist</u> 5514, 18 July 1948, Taylor Co., Ga. Among scattered scrub oak in sandhills 3 mi N of Butler (GA 29354). -- <u>Webster and Wilbur</u> 3574, 25 July 1950, Escambia Co., Fla. Dry oak woods on sandy soil 11 miles W of Pensacola (GA 94657). -- <u>Faircloth</u> 2798, 20 Aug. 1965, Thomas Co., Ga. Floodplain and banks on E side of Ochlocknee R., 5.5 mi SW of Coolidge (NCU 395212). -- <u>Godfrey</u> 71886, 31 Aug. 1972, Liberty Co., Fla. Frequent in longleaf pineturkey oak, upland ridge, Torreya State Park (FLAS 113724).

DISTRIBUTION: Sandhills, scrub oak pinelands, dry sandy pinelands, fine sandy soils of se Miss, s Ala, nw Fla, Coastal Plain of Ga, inner Coastal Plain of and sw SC, and se Coastal Plain of NC. Absent from Atlantic coastal counties.

<u>Galactia minor</u> is different from the other segments of <u>G</u>. <u>regularis</u> as follows: --

Internodes only a little longer than to much shorter than the largest leaflet of the adjacent nodes, stems often geniculate and rarely twining, hairs on the stem always antrorse and 0.05-0.25 mm long, largest leaflets 14-28 mm long, longest inflorescences little if any longer than to shorter than the subtending leaves. Flowers 1-3(4)

Several to most internodes (especially those toward the base) much longer than the largest leaflet of the adjacent nodes, stems not geniculate and occasionally twining, hairs on stems occasionally antrorse but more often retrorse and 0.1–0.8 mm long, largest leaflets 25–50 mm long, longest inflorescences longer than to sometimes more than twice as long as or rarely about as long as leaves, flowers 4-many - - - - - - - - - - - - - G. regularis

I have no strong opinion concerning how to treat those plants of "G. regularis" with antrorse hairs -- as another species, as a variety or part of G. minor, or as being allied with G. regularis. I know of others currently interested in this subject and leave this decision for them to make. It is interesting that Small (1933) reserved the name G. regularis for those individuals having minutely retrorse-pubescent stems. However, none of the other species he includes can be the antrorse-haired G. minor described here.

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<u>G. minor</u> might also be confused with <u>G. floridana</u> T. & G. var. <u>microphylla</u> Chapman but the type specimen (labeled: - Herb. Chapm --<u>Galactia floridana</u> T. & G. var. <u>microphylla</u> -- Florida -- Southern Flora) at the New York Botanical Garden has longer and spreading hairs and the leaflets are mostly apiculate. Also a specimen in the Gray Herbarium presumed to be one of Chapman's from Florida [labeled: - <u>Galactia microphylla</u>, Sp. n. (sine fl. et fr)], although with retuse leaflets, has spreading to somewhat retrorse hairs to 0.6 mm long on the stems. Furthermore, neither of these specimens has geniculate stems. This <u>microphylla</u> material seems more closely allied to <u>G. floridana</u> (Chapman, 1889).

## LITERATURE CITED

Chapman, A.W. 1889.

Flora of the Southern United States. Ivison, Blakeman, & Company. NY. [Copyright 1883] 698p.

Fernald, M.L. 1950.

Gray's Manual of Botany. American Book Company. NY. 1632p. Gleason, H.A. and A. Cronquist. 1963.

Manual of Vascular Plants of Northeastern United States and Adjacent Ganada. D. Van Nostrand Company, Inc. Princeton, NJ. 810p.

Radford, A.E. et al. 1964.

Manual of the Vascular Flora of the Carolinas. University of North Carolina Press. Chapel Hill. 1183p.

Small, J.K. 1933.

Manual of the Southeastern Flora. University of North Carolina Press. Chapel Hill. 1554p.

## Wilbur, R. L. 1963.

The Leguminous Plants of North Carolina. North Carolina Agricultural Experiment Station. Tech. Bul. 151. 294p.

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